



NOAA's NATIONAL WEATHER SERVICE Western Region Notes

September 7, 2006

REGIONAL DIRECTOR'S OFFICE

Leadership Corner: Perspectives

By Kim Runk, WFO Las Vegas MIC

December, 1964. A guard ship leaves Cape Town, South Africa to deliver a new inmate to Robben Island, a maximum security prison five miles off the coast. His name: Nelson Mandela. Mandela would spend almost 27 years of his life there as a falsely accused political prisoner. Ostensibly he was convicted for sedition against the government, but the truth is he was jailed for opposing racism. Mandela was forced to do hard labor in a quarry by day, returning at night to confinement in a small cell, sleeping on the floor, with a bucket for his toilet. He was allowed to write one letter every six months and once a year, he was permitted a visitor – for 30 minutes.

If I were subjected to the experience of Nelson Mandela, I'm almost certain it would have crushed my spirit and broken my will. I'm not proud of it, but I honestly don't believe I have the strength of character to tolerate that level of unjust treatment, without ending up bitter and resentful.

Not so for Mandela. His own assessment is that Robben Island was the crucible which transformed him into a mature leader. Through a clever intellect, charming charisma and uncompromising integrity, Mandela eventually earned the admiration of even the cruelest prison officials, and assumed an unquestioned leadership role as a prison inmate. He emerged from that experience a man equipped with the right mix of wisdom, maturity and universal respect to take on the great political battles that brought down apartheid and created a democratic republic in South Africa.

What are the qualities that allow a leader to prevail, and even thrive, while enduring the most severe trials of life? Through the lens of Nelson Mandela's experience, I can think of at least three.

1. Self Awareness

In 2001, Mandela told Oprah Winfrey, "If I had not been in prison, I would not have been able to achieve the most difficult task in life, and that is changing myself." In John Maxwell's book "*Winning with People*", he identifies the "Big Picture Principle" as a key component for personal growth and success. It's a viewpoint to help people see past their selfishness and to recognize a greater reality than themselves. Nelson Mandela didn't pity himself as a passive victim. He saw his confinement as a chance to build his own character. Instead of allowing his jailors to define or dehumanize him, Mandela fashioned a heroic identity for himself, one that inspired millions in Africa and around the world.

2. Relational Awareness

Nelson Mandela held on through 27 years of brutal imprisonment because he had an unswerving faith that his suffering would ultimately contribute to freedom and justice in South Africa. He maintained an optimistic hope that his situation could and would change. But he also understood that his ultimate influence on the larger environment began with his relationships right there at Robben Island. He patiently invested himself in the lives of others, fellow prisoners as well as guards, in order to build a foundation of trust that would eventually grow into a nationwide constituency powerful enough to topple an oppressive system of government.

3. Situational Awareness

A mature leader possesses an awareness of the surroundings and the ability to flex and adapt. He or she develops an intuition that senses the needs of the moment and prioritizes them over personal comfort. Those who manage to develop this trait have the capacity to adjust to the demands of their situation and create opportunities for change. Mandela never wavered in his principles: devotion to democracy, equality and personal growth. Despite terrible provocation, he never answered racism with racism. But he did change his methods and his strategies, according to the needs and circumstances of the day.

Summary

All three of these qualities could be summed up in one word: *perspective*. People who successfully go through a character building crucible of adversity have the right perspective about themselves and others. They cultivate meaningful relationships which result in mutual growth. They have the ability to see the bigger picture within the heat of the moment. Effective leaders can look beyond the problem, the issue, or the dark hour to find the will and composure to overcome, even seeing opportunity in the obstacles.

Nelson Mandela's life is a triumph of the human spirit. In the prime of his life, he was serving a life sentence with no reasonable expectation for freedom or vindication. By the end of the century, he had not only been released from prison, but he won the 1993 Nobel Peace Prize, and was inaugurated as the first democratically elected President of South Africa in 1994. He retired from public life in 1999 to his boyhood home town, a living legend and an inspiration throughout the world to all who are oppressed and deprived.

Fortunately, few of us will be called to endure the degree of adversity faced by Nelson Mandela. Even fewer are destined for his level of greatness. But each of us can learn from him. We can choose to let difficulties make us bitter, or we can choose to use them as opportunities for growth. John Wooden said it this way: "There is a choice to make in everything you do. But in the end, the choices you make, make you." It's time to choose.

METEOROLOGICAL SERVICES DIVISION

Service of the Week: Our "Service of the Week" goes to WFO Flagstaff. On August 24, heavy monsoon thunderstorms hit the region. In just under two hours in the early-mid afternoon, the staff issued five Flash Flood Warnings (FFW) for northern and central Arizona. Below is an excerpt of the first FFW issued that day:

"HEAVY RAINFALL FROM STRONG THUNDERSTORMS HAVE CAUSED FLOODING ALONG PORTIONS OF GRANITE CREEK. THE USGS GAUGE AT GRANITE CREEK IS REPORTING A STAGE OF 9.7 FEET...OR ABOUT 1 FOOT ABOVE FLOOD STAGE. TRIBUTARIES OF GRANITE CREEK ARE RUNNING FULL AND ARE EMPTYING INTO GRANITE CREEK...FURTHER WORSENING THE SITUATION. FLOODING IN AND AROUND THE GRANITE CREEK AREA...AS WELL AS IN THE CITY OF PRESCOTT HAS BEEN REPORTED BY YAVAPAI EMERGENCY MANAGEMENT PERSONNEL. ADDITIONAL RAINFALL AMOUNTS OF ONE HALF INCH TO ONE INCH ARE POSSIBLE IN THE WARNED AREA AS STORMS CONTINUE TO BUILD AND MOVE OVER THE FLASH FLOOD AREA."

Additional information provided in the warning mentioned "local law enforcement officials and emergency management personnel" reported flash flooding in the warned area. The added real-time information and inclusion of reports from local officials adds considerable weight to the warning, clearly indicating the flooding was actually occurring (or imminent). Even with the additional information, the warning was concise and to the point. Great job, Flagstaff!

Lightning Expert Visits WFO San Diego: On August 22, Ron Holle, from Vaisala, Inc, Tucson, AZ, gave a presentation on lightning and lightning safety to the staff at WFO San Diego. Ron is a former NOAA meteorologist, having retired from the Federal Government with many years of research work at NOAA labs in Norman, OK, Boulder, CO, Coral Gables, FL, and Silver Springs, MD. Ron discussed the lightning detection network, which is owned and operated by Vaisala, and used by the NWS in numerous displays, especially

AWIPS. He noted that the current network sensors record lightning strokes to about 400 miles, limiting lightning information over the waters away from the coast. New technology may enable them to accurately see cloud-to-water strokes over the open ocean. On the subject of lightning safety, Ron helped develop the “30/30 rule”. This rule is currently being used by the NCAA for crowd and participant safety in sporting events. Ron also advocated the NWS rethink its safety guidelines recommending the "crouch" position if caught outdoors in a thunderstorm. He recommended instead attempting to get into a metal topped car, or into a building with electrical wires and plumbing. He said the crouch position does not noticeably reduce the risk of being struck by lightning.



(L to R) WCM Dave Soroka and KNEW Radio show host Mik Maguire

Marine Weather Information Part of Weekly Radio Show:

WFO Monterey recently began participating in a weekly radio show in the San Francisco Bay Area. Monterey’s part in the show began Sunday, September 4, when WCM Dave Soroka joined Mik Maguire of station KNEW on location for a weekly radio show focusing on boating. The first segment took place in Oakland and lasted 40 minutes. They discussed the National Weather Service Marine program, including information on how mariners can access weather data through the internet and NOAA All Hazards Radio.

Through Monterey’s weekly participation, the NWS is able to reach thousands of Bay Area boaters and provide them the most up-to-date forecast and other important information.



The Mudd Fire burns near WFO Elko.

Wildfire Forces WFO Elko Evacuation: A wildfire (officially named by fire officials the “Mudd” fire), began around 3 pm on August 23 near WFO Elko, and quickly grew to thousands of acres in size by evening. Winds gusting to 40 mph out of the west-northwest caused the fire to grow rapidly and approach nearby residential areas in Elko County.

Evacuation plans were put into effect for Kittridge Canyon Estates, adjacent to WFO Elko. Due to concerns over fire and dense smoke, WFO Elko staff evacuated the building that evening. WFO Reno performed full backup duties for WFO Elko during the evacuation. Hundreds of firefighters already in the area for other

wildfires converged on the fire, and were able to save threatened residences. There was no damage to the Elko Forecast Office, and staff returned the following morning. The fire was human-caused and was still under investigation at this writing.

Aviation Outreach – Southwest Airlines: Scott Birch visited the Southwest Airlines (SWA) Dispatch Office on August 29. Scott was able to observe SWA hurricane operations since Tropical Storm Ernesto was approaching the Florida Keys at the time of the visit. The tropical forecasts and Florida WFO TAFs were very important since SWA was closing or planning to close numerous southern and central Florida operations. Also during the visit with Rick Curtis of SWA, Scott discussed the NWS/SWA verification project. The project information will be shared with the WFOs in the coming months.

Aviation Outreach – Delta Airlines: Scott Birch and Carl Gorski visited the Delta Airlines Meteorology Department in Atlanta, Georgia on August 31. The Delta Airlines Meteorology Department consists of a staff of 12 meteorologists which operates 24x7. They write 16 domestic TAFs (3 in WR – SLC, LAX, SFO) in addition to International responsibility. Delta relies on 16 NWS WR TAFS for their operations. The visit gave Carl and Scott the opportunity to observe Delta Airlines tropical storm operations. Delta was concerned about airport operations from Atlanta to Washington D.C. because of the wind from Ernesto. The Delta Airlines Meteorologists were able to provide a constant weather watch with frequent briefings on the storm development.

HYDROLOGY AND CLIMATE SERVICES DIVISION



(L to R) Dave Brandon, HSCD Chief; Gina Loss, WFO Great Falls SSH; John Bohlinger, Lieutenant Governor of Montana; Steve Brueske, WFO Great Falls MIC.

2006 Montana Hydrology Conference: The 2006 Montana Hydrology Conference was held August 22-24 in Helena, Montana. The conference focused on hydrologic issues throughout Montana and included talks about the National Weather Service's Advanced Hydrologic Prediction Services (AHPS), snow pack measurement and estimation, river ice engineering research, and ice jam emergency response. Sixty-one people attended the conference that was hosted by WFO Great Falls, MT and organized by WFO Great Falls Senior Service Hydrologist Gina Loss. Attendees included representatives from 6 federal agencies, 13 state and county agencies, 6 private companies, and a Professor of Environmental and Civil Engineering from the University of Alberta, Canada. Montana's Lieutenant Governor John Bohlinger was the guest speaker at one of the luncheons. Attendees also visited a SNOTEL (SNOPack TELEmetry) sensor site in a nearby national forest that burned in

2003. Funding for the conference was provided by the National Weather Service's Advanced Hydrologic Prediction Services.

SCIENTIFIC SERVICES DIVISION

New WES PC - Shipping and Set-up: The new WES PCs from HP have started to arrive at the Forecast Offices. The graphic cards were shipped separately two weeks ago. WDTB is drafting a WES Implementation and Operations Plan (WES IOP). The WES IOP will provide technical assistance on how to set up the WES. The Plan will be ready by September 18. WR/SSD suggests that the offices leave the new PC alone until the WES IOP instructions are sent out.

WR Verification Project: The next set of office reports are due September 10. The next verification call is scheduled for Wednesday, September 20

Special thanks to the SOOs below for their presentations during the August 23 call:

- Pocatello – Dean Hazen
- Pendleton - Jon Mittelstadt
- Salt Lake City -- Randy Graham
- Phoenix -- Doug Green
- Reno - fire case - Jim Fischer
- Monterey - heat wave case - Warren Blier

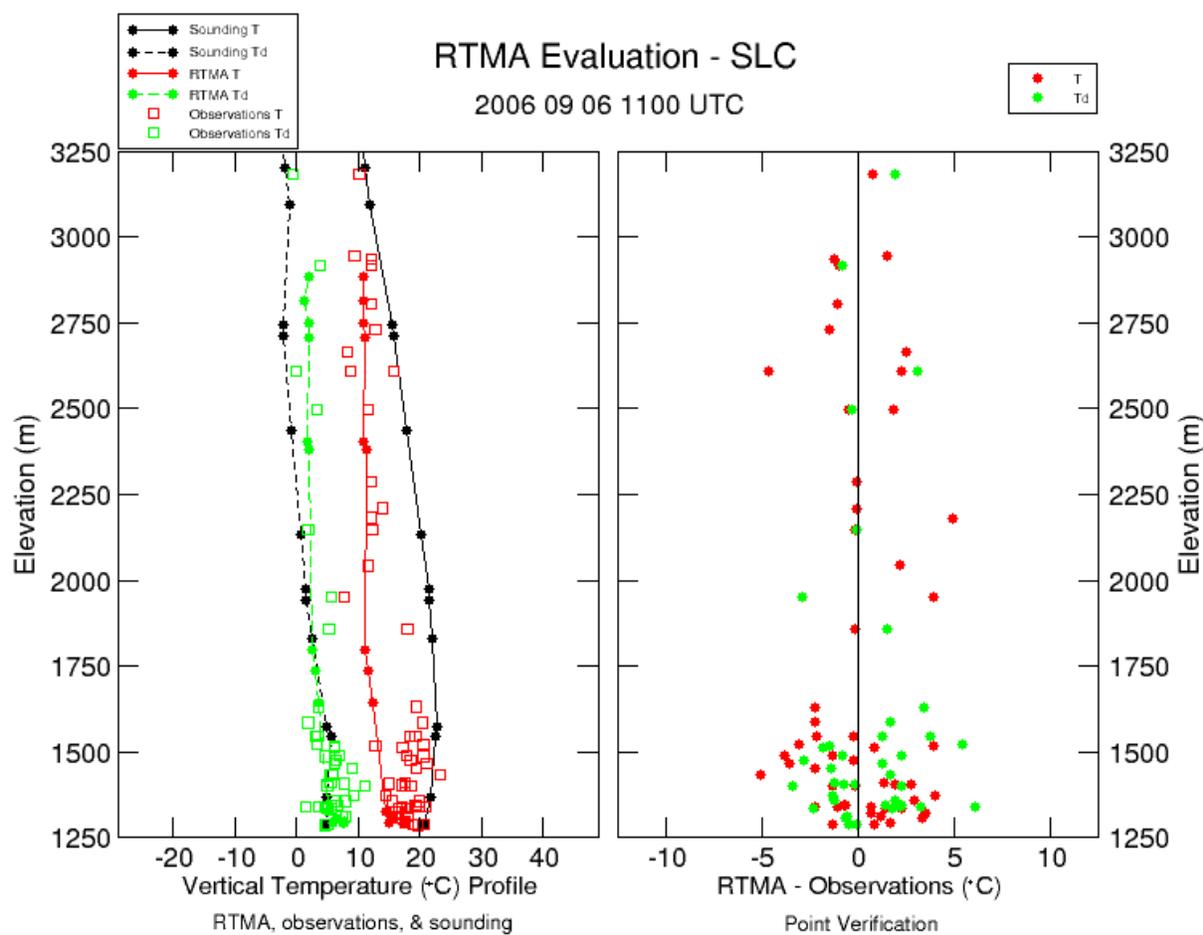
AHPS Verification: SSD organized a seminar at the CBRFC to present the results of an AHPS research contract to recommend verification measures and their presentation for hydrologic forecasts. The contractors included Bisher Imam (UC – Irvine) and Holly Hartman (Univ. Arizona). The seminar was attended by several RFCs and OHD. A very good discussion followed the seminar. SSD hosted Bisher and Holly the remainder of the week to flush out the contractual report and address the discussion from the seminar. This project is complete.

SMART Prism Project: The WR/SSD – OSU collaborative project to develop PRISM grids based on storm regime is nearing completion. SSD is scheduling a seminar October 19 (11am) at WRH for PI Chris Daly to report on his project. This project will be complete following the seminar. However, it is expected that the results of this project may form the basis for future NWS projects.

Water Supply Forecast Web Team: The team will begin meeting again in September to add new features and information to the successful WR Water Supply Web Page. The team has been expanded to include reps from the neighboring RFCs in SR and CR that issue water supply forecasts.

Fall AGU Meeting: SSD is co-organizing a special session at this fall's AGU Meeting in San Francisco entitled "H26: Applications of Seasonal Climate Predictions in Hydrology, Water Management, and Other End Use Sectors." WR employees having experience in these areas are especially encouraged to submit an abstract on their work. Abstracts for presentations are due September 1. Kevin Werner is the contact. More information is here: <http://www.agu.org/meetings/fm06/?content=search&show=detail&sessid=249>

RTMA Evaluation: SSD has updated the RTMA evaluation web page to include more observations. The radisonde data is also plotted at 11 and 23z. Chad Kahler is the contact. The website is: www.wrh.noaa.gov/wrh/rtma



New Western Region Technical Attachments

WRTA 06-06: Analysis of the 18 July 2005 Microburst Wind Event at Phoenix Sky Harbor Airport: A Comparison of the WSR-88D and TDWR Radars

Michael Fowle, WFO Phoenix, AZ (now at WFO Milwaukee, WI)

<http://www.wrh.noaa.gov/wrh/06TAs/ta0606.pdf>

WRTA 06-07: Western Region Digital Services Verification Project - Using Verification to Support Service Evolution - Getting Started
 Andy Edman, WR Scientific Services Division
<http://www.wrh.noaa.gov/wrh/06TAs/ta0607.pdf>

Upcoming Science Workshops

10th Annual Great Divide Weather Workshop: The 10th Annual Great Divide Workshop will be held October 3-5 in Billings, Montana. NOAA's National Weather Service Offices in Billings and Glasgow are sponsoring this workshop focusing on the exchange of weather and hydrologic forecasting information unique to the Northern Rockies and High Plains. The workshop will be held at the Sheraton Hotel in Billings. More information can be found on the Internet at weather.gov/Billings or weather.gov/Glasgow or by contacting NOAA's National Weather Service Forecast Offices in Billings, Montana at (406) 652-0851 or Glasgow, MT at (406) 228-4042.

The workshop will be held at: Billings Crowne Plaza Hotel (formerly the Sheraton) in downtown Billings. Their phone number is 1-877-227-6963. Rooms rates are: \$60.00 per night by mentioning the National Weather Service. Reservations must be made by September 18th to ensure this rate

Thirteenth Annual Workshop on Weather Prediction in the Intermountain West: The Thirteenth Annual Workshop on Weather Prediction in the Intermountain West will be held November 16 on the University of Utah campus. This Workshop will be hosted by the Mountain Meteorology Group in the Department of Meteorology. This year's workshop is focused on the lessons learned from field programs and operational deployments of surface meteorological equipment in the West. The Workshop is intended to be a forum to discuss the impacts of the practical limitations associated with surface instrumentation in the mountainous West on environmental records, data assimilation systems, and weather forecasts. To submit an abstract or register, please access the on-line registration form at http://www.met.utah.edu/jhorel/workshop2006/workshop_reg.html. The deadline for abstract submission is October 1. The registration deadline is November 1.

Training Update:

COMET - WRF Training Modules: The COMET Program has released a new web module entitled Rip Currents: Forecasting. This is the 3rd and final module in the series aimed at training operational weather forecasters to understand the factors that lead to rip current development and to predict the daily risk level of this hazard. This module is available at <http://www.met.ed.ucar.edu/marine/ripcurrents/forecasting/> and takes approximately 2.5 hours to complete. All NWS employees should access this training module and complete the final quiz through the NOAA LMS at <http://e-learning.doc.gov/noaa/>.

Warning Decision Branch – AWOC: AWOC Winter Weather training is now available through the LMS. Please see <http://www.wdtb.noaa.gov/courses/winterawoc/index.html> for more details on the AWWT.

Teletraining Sessions: The Virtual Institute for Satellite Integration Training (VISIT) calendar for September is now available. Offices can register for the teletraining sessions by sending email to: visit@comet.ucar.edu. The teletraining calendar is now at: <http://rammb.cira.colostate.edu/visit/ecal.asp>

The teletraining planning calendar with other sessions is at: <http://rammb.cira.colostate.edu/visit/planning.html>

The current sessions planned for September are:

- The GOES 3.9 mm Channel (Basic, Sept 19)
- Cyclogenesis: Analysis utilizing Geostationary Satellite Imagery (Basic, Sep 14,26)
- Use of GOES/RSO imagery with other Remote Sensor Data for Diagnosing Severe Weather across CONUS (RSO 3) (Intermediate, Sep 12,13)
- GOES Sounder Data and Products (Basic, Sep 1,8)
- GOES High Density Winds (Basic, Sep 11)
- The Enhanced-V: A Satellite Severe Storm Signature (Basic, Sep 15)
- Forecasting Convective Downburst Potential Using GOES Sounder Derived Products (Basic, Sep 21)
- Water Vapor Channel Satellite Imagery (Basic, Sep 25)

Several recorded VISIT session are available via LMS: <http://e-learning.doc.gov/coursecatalog/index.cfm>. Then, go to National Weather Service Courses and search on VISIT.

All previous sessions including those with recorded instructor audio and annotations are available at: <http://rammb.cira.colostate.edu/visit/ts.html>

SYSTEMS OPERATIONS DIVISION

Best Wishes: On September 15, 2006, Jeff Walker will work his final day with NOAA/NWS. Jeff is retiring after 36 years of government service. We will miss him and wish him well on his new chapter in life. Congrats and Best Wishes!

Phone Upgrade: Steve Keene traveled to WFO Pendleton and upgraded the phone and voice mail systems. This last upgrade for this fiscal year will be Great Falls.

NWR: On August 28, FET Jim Chaisson was dispatched to the Black Tail Mountain NOAA Weather Radio site for commercial and standby power problems from a possible lighting strike. Jim began to troubleshoot the problem with technical guidance from FET Tom Page via telephone. The problem was quickly diagnosed as a shorted circuit card, a new card was shipped in overnight, replaced and the system was verified to full operational capability within 24 hours.

HVAC: FET Dan Clark traveled to the Eureka NEXRAD site (Bunker Hill) and replaced the aging 5 ton BARD units with new 6 ton units.

Environmental and Safety: FETs Randy Miller and Tom Page traveler to the Reno Radar site Aug 28th to install a fuel return line on the 1000 gallon diesel storage tank. This line will prevent fuel spillage if the system should ever fail. The Facility team also completed several maintenance items as well.

WR had ZERO Safety Incidents in August: We have a total of 19 safety incidents this fiscal year (9 recordable and 9 reportable) as compared to 30 incidents last fiscal year (19 recordable and 9 reportable). Changes from FY05 to current FY06 are:

Total incidents:	decrease of 40%
Recordable incidents:	decrease of 52.6%
Reportable incidents:	zero change